1. Identification

Product identifier: Aerosol Leak Detector - 18 oz

Other means of identification:
- Product Code: No. 14503 (Item# 1004997)
- Recommended use: Leak detector
- Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information:
- Manufactured or sold by:
  - Company name: CRC Industries, Inc.
  - Address: 885 Louis Dr.
  - Warminster, PA 18974 US
  - Telephone: 215-674-4300
  - General Information: 800-521-3168
  - Technical Assistance: 800-272-4620
  - Customer Service: 800-424-9300 (US)
  - 24-Hour Emergency (CHEMTREC): 800-424-9300 (US)
  - Website: www.crcindustries.com

2. Hazard(s) identification

Physical hazards: Gases under pressure
- Liquefied gas

Health hazards:
- Skin corrosion/irritation
- Serious eye damage/eye irritation

Environmental hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements:
- Signal word: Warning
- Hazard statement: Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation.
- Precautionary statement:
  - Prevention: Do not puncture or incinerate container. Do not expose to heat or store at temperatures above 49 °C/120 °F. Use with adequate ventilation. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Wash thoroughly after handling. Wear eye protection/face protection. Wear protective gloves.
  - Response: If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
  - Storage: Protect from sunlight. Store in a well-ventilated place. Exposure to high temperature may cause can to burst.
  - Disposal: Dispose of contents/container in accordance with local/regional/national regulations.
- Hazard(s) not otherwise classified (HNOC): None known.
- Supplemental information: None.
3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Mixtures</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>water</td>
<td>HFC-152a</td>
<td>7732-18-5</td>
<td>80 - 90</td>
</tr>
<tr>
<td>1,1-difluoroethane</td>
<td>5 - 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-butoxyethanol</td>
<td>111-76-2</td>
<td>3 - 5</td>
<td></td>
</tr>
<tr>
<td>lauramine oxide</td>
<td>1643-20-5</td>
<td>&lt; 0.2</td>
<td></td>
</tr>
</tbody>
</table>

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

**Inhalation**
Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact**
Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**Eye contact**
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Ingestion**
In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth.

**Most important symptoms/effects, acute and delayed**
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

**Indication of immediate medical attention and special treatment needed**
Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

**General information**
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

**Suitable extinguishing media**
Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

**Unsuitable extinguishing media**
None known.

**Specific hazards arising from the chemical**
Pressurized container may rupture when exposed to heat or flame. During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire-fighting equipment/instructions**
In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.

**General fire hazards**
Contents under pressure. Pressurized container may rupture when exposed to heat or flame.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**
Eliminate all ignition sources (no smoking, flames, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water. Stop the flow of material, if this is without risk. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

**Environmental precautions**
Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage

Precautions for safe handling
Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. For product usage instructions, see the product label.

Conditions for safe storage, including any incompatibilities
Level 1 Aerosol.

Contents under pressure. Do not expose to heat or store at temperatures above 120 °F/49 °C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Store in a well-ventilated place. Stored containers should be periodically checked for general condition and leakage. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-butoxyethanol (CAS 111-76-2)</td>
<td>PEL</td>
<td>240 mg/m³</td>
</tr>
<tr>
<td>2-butoxyethanol (CAS 111-76-2)</td>
<td>TWA</td>
<td>20 ppm</td>
</tr>
<tr>
<td>2-butoxyethanol (CAS 111-76-2)</td>
<td>TWA</td>
<td>24 mg/m³</td>
</tr>
<tr>
<td>1,1-difluoroethane (CAS 75-37-6)</td>
<td>TWA</td>
<td>2700 mg/m³</td>
</tr>
</tbody>
</table>

Biological limit values

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
<th>Determinant</th>
<th>Specimen</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-butoxyethanol (CAS 111-76-2)</td>
<td>200 mg/g</td>
<td>Butoxyacetic acid (BAA), with hydrolysis</td>
<td>Creatinine in urine</td>
<td>*</td>
</tr>
</tbody>
</table>

* - For sampling details, please see the source document.

Exposure guidelines

**US - California OELs: Skin designation**
2-butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

**US - Minnesota Haz Subs: Skin designation applies**
2-butoxyethanol (CAS 111-76-2) Skin designation applies.

**US - Tennessee OELs: Skin designation**
2-butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

**US NIOSH Pocket Guide to Chemical Hazards: Skin designation**
2-butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower should be available when handling this product.

**Eye/face protection**
- Wear safety glasses with side shields (or goggles).

**Skin protection**
- **Hand protection**
  - Wear protective gloves such as: Nitrile. Rubber.
- **Other**
  - Wear appropriate chemical resistant clothing.

**Respiratory protection**
- If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

**Thermal hazards**
- Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**
- When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

### 9. Physical and chemical properties

**Appearance**
- **Physical state**: Liquid.
- **Form**: Aerosol.
- **Color**: Colorless.
- **Odor**: Mild.
- **Odor threshold**: Not available.
- **pH**: 10.4
- **Melting point/freezing point**: 32 °F (0 °C) estimated
- **Initial boiling point and boiling range**: 212 °F (100 °C) estimated
- **Flash point**: None.
- **Evaporation rate**: Slow.
- **Flammability (solid, gas)**: Not available.

**Upper/lower flammability or explosive limits**
- **Flammability limit - lower (%)**: 1.3 % estimated
- **Flammability limit - upper (%)**: 23.5 % estimated

**Vapor pressure**: 432.5 hPa estimated
**Vapor density**: Not available.
**Relative density**: 0.99
**Solubility(ies)**
- **Solubility (water)**: Soluble.
- **Partition coefficient (n-octanol/water)**: Not available.
**Auto-ignition temperature**: 446 °F (230 °C) estimated
**Decomposition temperature**: Not available.
**Viscosity**: Not available.
**Percent volatile**: 99.7 % estimated

### 10. Stability and reactivity

**Reactivity**
- The product is stable and non-reactive under normal conditions of use, storage and transport.
Material is stable under normal conditions.

**Chemical stability**

No dangerous reaction known under conditions of normal use.

**Possibility of hazardous reactions**

Heat, flames and sparks. Contact with incompatible materials.

**Conditions to avoid**

Strong oxidizing agents.

**Incompatible materials**


**Hazardous decomposition products**

**11. Toxicological information**

**Information on likely routes of exposure**

- **Inhalation**: Prolonged inhalation may be harmful.
- **Skin contact**: Causes skin irritation.
  
  2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

- **Eye contact**: Causes serious eye irritation.

- **Ingestion**: Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics**

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

**Information on toxicological effects**

**Acute toxicity**

Not known.

**Components**

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-butoxyethanol (CAS 111-76-2)</td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**

Causes skin irritation.

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**Respiratory or skin sensitization**

- **Respiratory sensitization**: Not a respiratory sensitizer.
- **Skin sensitization**: This product is not expected to cause skin sensitization.

**Germ cell mutagenicity**

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**

Not classifiable as to carcinogenicity to humans.

- **IARC Monographs. Overall Evaluation of Carcinogenicity**
  
  2-butoxyethanol (CAS 111-76-2) 3 Not classifiable as to carcinogenicity to humans.

  
  Not regulated.

- **US. National Toxicology Program (NTP) Report on Carcinogens**
  
  Not listed.

**Reproductive toxicity**

This product is not expected to cause reproductive or developmental effects.

- **Specific target organ toxicity - single exposure**: Not classified.

- **Specific target organ toxicity - repeated exposure**: Not classified.

- **Aspiration hazard**: Not an aspiration hazard.
12. Ecological information

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerosol Leak Detector - 18 oz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia 1308.569 mg/l, 48 hr estimated</td>
</tr>
<tr>
<td>Components</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-butoxyethanol (CAS 111-76-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Inland silverside (Menidia beryllina) 1250 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability

No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

<table>
<thead>
<tr>
<th>Component</th>
<th>log Kow</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1-difluoroethane</td>
<td>0.75</td>
</tr>
<tr>
<td>2-butoxyethanol</td>
<td>0.83</td>
</tr>
</tbody>
</table>

Mobility in soil

No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions

The dispensed liquid product is not a RCRA hazardous waste (See 40 CFR Part 261.20 - 261.33). Empty container can be recycled. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose in accordance with all applicable regulations.

Hazardous waste code

Not regulated.

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number: UN1950
UN proper shipping name: Aerosols, non-flammable, Limited Quantity
Transport hazard class(es)
- Class 2.2
- Subsidiary risk -
- Label(s) 2.2
Packaging exceptions: 306
Packaging non bulk: None
Packaging bulk: None

Special precautions for user

Read safety instructions, SDS and emergency procedures before handling.

IATA

UN number: UN1950
UN proper shipping name: Aerosols, non-flammable, Limited Quantity
Transport hazard class(es)
- Class 2.2
- Subsidiary risk -
Packaging group: Not applicable.
ERG Code: 2L
Special precautions for user

Read safety instructions, SDS and emergency procedures before handling.
Other information

<table>
<thead>
<tr>
<th>Aircraft Type</th>
<th>Allowance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger and cargo aircraft</td>
<td>Allowed with restrictions.</td>
</tr>
<tr>
<td>Cargo aircraft only</td>
<td>Allowed with restrictions.</td>
</tr>
</tbody>
</table>

**IMDG**

- **UN number**: UN1950
- **UN proper shipping name**: AEROSOLS, Limited Quantity
- **Transport hazard class(es)**:
  - **Class**: 2.2
  - **Subsidiary risk**: -
- **Packing group**: Not applicable.
- **Environmental hazards**: Not applicable.
- **Marine pollutant**: No.
- **EmS**: Not available.
- **Special precautions for user**: Read safety instructions, SDS and emergency procedures before handling.

**15. Regulatory information**

**US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

- **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**
  - Not regulated.
- **SARA 304 Emergency release notification**
  - Not regulated.
  - Not regulated.
- **US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance**
  - 2-butoxyethanol (CAS 111-76-2)
- **CERCLA Hazardous Substance List (40 CFR 302.4)**
  - 2-butoxyethanol (CAS 111-76-2)
- **CERCLA Hazardous Substances: Reportable quantity**
  - Not listed.

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

**Other federal regulations**

- **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**
  - Not regulated.
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
1,1-difluoroethane (CAS 75-37-6)
Safe Drinking Water Act (SDWA) Not regulated.
Food and Drug Administration (FDA) Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Classified hazard categories
- Gas under pressure
- Skin corrosion or irritation
- Serious eye damage or eye irritation

SARA 302 Extremely hazardous substance Not listed.
SARA 311/312 Hazardous chemical Yes
SARA 313 (TRI reporting)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>% by wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-butoxyethanol</td>
<td>111-76-2</td>
<td>3 - 5</td>
</tr>
</tbody>
</table>

US state regulations
US. New Jersey Worker and Community Right-to-Know Act
1,1-difluoroethane (CAS 75-37-6)
2-butoxyethanol (CAS 111-76-2)

US. Massachusetts RTK - Substance List
1,1-difluoroethane (CAS 75-37-6)
2-butoxyethanol (CAS 111-76-2)

US. Pennsylvania Worker and Community Right-to-Know Law
2-butoxyethanol (CAS 111-76-2)

US. Rhode Island RTK Not listed.

California Proposition 65
WARNING: Cancer - www.P65Warnings.ca.gov

California Proposition 65 - CRT: Listed date/Carcinogenic substance
diethanolamine (CAS 111-42-2) Listed: June 22, 2012

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))
2-butoxyethanol (CAS 111-76-2)

Volatile organic compounds (VOC) regulations
EPA
VOC content (40 CFR 51.100(s)) 5.3 %
Consumer products (40 CFR 59, Subpt. C) Not regulated

State
Consumer products Not regulated
VOC content (CA) 5.3 %
VOC content (OTC) 5.3 %

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Country(s) or region</td>
<td>Inventory name</td>
<td>On inventory (yes/no)*</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
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<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>No</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
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<tr>
<td>Taiwan</td>
<td>Taiwan Chemical Substance Inventory (TCSI)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

<table>
<thead>
<tr>
<th>Issue date</th>
<th>03-26-2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepared by</td>
<td>Dustin Kern</td>
</tr>
<tr>
<td>Version #</td>
<td>01</td>
</tr>
<tr>
<td>Further information</td>
<td>CRC # 843A/1002817</td>
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<tr>
<td>Disclaimer</td>
<td>The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC's knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health &amp; safety professional, or CRC Industries, Inc..</td>
</tr>
<tr>
<td>Revision information</td>
<td>Product and Company Identification</td>
</tr>
<tr>
<td></td>
<td>Composition / Information on Ingredients: Ingredients</td>
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<td></td>
<td>First-aid measures: Ingestion</td>
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<tr>
<td></td>
<td>Handling and storage: Precautions for safe handling</td>
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<tr>
<td></td>
<td>Physical &amp; Chemical Properties: Multiple Properties</td>
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<td>Toxicological Information: Toxicological Data</td>
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<td>Ecological Information: Ecotoxicity</td>
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<td>Transport Information: Material Transportation Information</td>
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<td></td>
<td>Regulatory information: Safe Drinking Water Act (SDWA)</td>
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<td></td>
<td>GHS: Classification</td>
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</table>